

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 126)

FOIL the expressions shown below:

1. $(-5x - 8)(3x + 4)$

$$\begin{aligned} &(-5)(3)x^2 + (-5)(4)x + (-8)(3)x + (-8)(4) \\ &(-15)x^2 + (-20)x + (-24)x + (-32) \\ &-15x^2 - 44x - 32 \end{aligned}$$

2. $(3x + 5)(3x + 6)$

$$\begin{aligned} &(3)(3)x^2 + (3)(6)x + (5)(3)x + (5)(6) \\ &(9)x^2 + (18)x + (15)x + (30) \\ &9x^2 + 33x + 30 \end{aligned}$$

3. $(4x + 9)(-3x + 3)$

$$\begin{aligned} &(4)(-3)x^2 + (4)(3)x + (9)(-3)x + (9)(3) \\ &(-12)x^2 + (12)x + (-27)x + (27) \\ &-12x^2 - 15x + 27 \end{aligned}$$

4. $(-3x + 6)(-3x + 3)$

$$\begin{aligned} &(-3)(-3)x^2 + (-3)(3)x + (6)(-3)x + (6)(3) \\ &(9)x^2 + (-9)x + (-18)x + (18) \\ &9x^2 - 27x + 18 \end{aligned}$$

5. $(7x - 7)(8x + 7)$

$$\begin{aligned} &(7)(8)x^2 + (7)(7)x + (-7)(8)x + (-7)(7) \\ &(56)x^2 + (49)x + (-56)x + (-49) \\ &56x^2 - 7x - 49 \end{aligned}$$

FOIL the expressions shown below:

6. $(8x - 6)(-7x + 5)$

$$\begin{aligned}(8)(-7)x^2 + (8)(5)x + (-6)(-7)x + (-6)(5) \\ (-56)x^2 + (40)x + (42)x + (-30) \\ -56x^2 + 82x - 30\end{aligned}$$

7. $(8x + 9)(-2x - 2)$

$$\begin{aligned}(8)(-2)x^2 + (8)(-2)x + (9)(-2)x + (9)(-2) \\ (-16)x^2 + (-16)x + (-18)x + (-18) \\ -16x^2 - 34x - 18\end{aligned}$$

8. $(2x + 2)(-3x + 5)$

$$\begin{aligned}(2)(-3)x^2 + (2)(5)x + (2)(-3)x + (2)(5) \\ (-6)x^2 + (10)x + (-6)x + (10) \\ -6x^2 + 4x + 10\end{aligned}$$

9. $(5x + 4)(-5x - 6)$

$$\begin{aligned}(5)(-5)x^2 + (5)(-6)x + (4)(-5)x + (4)(-6) \\ (-25)x^2 + (-30)x + (-20)x + (-24) \\ -25x^2 - 50x - 24\end{aligned}$$

10. $(7x - 5)(-4x - 9)$

$$\begin{aligned}(7)(-4)x^2 + (7)(-9)x + (-5)(-4)x + (-5)(-9) \\ (-28)x^2 + (-63)x + (20)x + (45) \\ -28x^2 - 43x + 45\end{aligned}$$